Internal Application No PCT/EP2004/009379

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01T1/202

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 GO1T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, BIOSIS

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of th	· Relevant to claim No:			
A	WO 94/02946 A (UNIV JEFFERSON) 3 February 1994 (1994-02-03) page 3, line 17 - page 7, line page 8, line 29 - page 10, lir page 12, line 12 - page 16, li	1-8, 19-21			
A	DOSIMETRY FOR SCANNING PROTON MEDICAL PHYSICS, AMERICAN INST	TRY FOR SCANNING PROTON BEAMS" L PHYSICS, AMERICAN INSTITUTE OF S. NEW YORK, US, 5, no. 4, 1 April 1998 (1998-04-01), 464-475, XP000782525 0094-2405			
	-/				
X Furt	ther documents are listed in the continuation of box C.	Patent family members are lis	ted in annex.		
"A" docum consider filing of "L" docume which citation "O" docume other	ategories of cited documents:  ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another on or other special reason (as specified) the priority of an oral disclosure, use, exhibition or means ent published prior to the international filing date but than the priority date claimed	"T" later document published after the or priority date and not in conflict cited to understand the principle of invention."  "Y" document of particular relevance; to cannot be considered novel or calinvolve an inventive step when the "Y" document of particular relevance; to cannot be considered to involve a document is combined with one of ments, such combination being of in the art.  "&" document member of the same pa	with the application but or theory underlying the he claimed invention mot be considered to e document is taken alone the claimed invention in inventive step when the ir more other such docubivious to a person skilled		
Date of the	actual completion of the international search	Date of mailing of the international	search report		
3	November 2004	2 4. 01. 20	705		
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk	Authorized officer			
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,				

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C (Continue	ation) DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °		Relevant to claim No.		
A	US 5 672 465 A (PATEL GORDHANBHAI N ET AL) 30 September 1997 (1997-09-30) column 5, line 28 - column 10, line 30 column 18, line 41 - column 20, line 32	<u>.</u>	1-8, 19-21 1-8, 19-21	
A	HOSS P. ET AL.: "Time-integrated phosphor behaviour in gated image intensifier tubes" IMAGE INTENSIFIERS AND APPLICATIONS II, vol. 4128, 3 August 2000 (2000-08-03), - 4 August 2000 (2000-08-04) pages 23-28, XP002278354 San Diego, CA, USA the whole document			
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...ternational application No. PCT/EP2004/009379

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)					
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:					
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:					
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful Imternational Search can be carried out, specifically:					
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).					
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)					
This International Searching Authority found multiple inventions in this international application, as follows:					
see additional sheet					
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.					
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.					
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:					
A. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  See annex					
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.					

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

#### 1. claims: 1-8, 19-21

An inorganic scintillating mixture and its use comprising at least a first and a second component each having a characteristic behaviour in response to the irradiation with charged particles, such as protons and heavy ions, showing a typical Bragg peak with respect to a relative depth dose, the first component having a quenching characteristic in the Bragg peak region, the second component showing an increased efficiency in the Bragg peak region both related to a reference curve for the relative dose and a third component with binder characteristics in order to hold the other components in a desired mechanical shape.

#### 2. claims: 9-18

Sensor assembly for charged particle dosimetry, such as proton or heavy ion dosimetry, comprising: a three-dimensional array of sensor heads, each sensor head being located on one end of an optical fibre, the opposite end of the optical fibre being associated with an optical light intensity measuring assembly, each sensor head and at least partially its optical fibre being inserted into a respective cavity located in a holder member.

Inter II Application No PCT/EP2004/009379

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9402946	Α	03-02-1994	WO US	9402946 A1 5514874 A	03-02-1994 07-05-1996
US 5672465	Α	30-09-1997	US WO	5420000 A 9621885 A1	30-05-1995 18-07-1996